# ASX Announcement

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# New Significant Drill Results Extend Mineralisation at Kadutu Prospect, DRC

#### Highlights

#### Ngoy Project – Kadutu Prospect

- Assay results received for 14 additional holes NGODD031 to NGODD044 drilled as part Kadutu Phase II drilling programme
- All holes, with the exception of two, intersected gold mineralisation
- Significant assay results received include:
  - NGODD033: 5.90m @ 2.44g/t Au
  - NGODD037: 3.40m @ 11.96g/t Au
  - NGODD038: 18.80m @ 1.99g/t Au (includes 4.60m @ 6.21g/t Au)
  - NGODD039: 16.70m @ 2.38g/t Au (includes 8m @ 4.36g/t Au)
  - NGODD040: 18.30m @ 1.38g/t Au
- The Phase II drilling programme at Kadutu has been completed with a total of 32 holes drilled for approximately 5,750m
- A drill rig is being maintained on site on standby in readiness to start the Kadutu Phase III programme once all results for Phase II are received and analysed
- The drilling programme has confirmed a strike continuity of the mineralised structure over a length of 750m and to a depth of more than 150m
- Mineralisation remains open both along strike and at depth
- Drilling has identified high grade, plunging shoots within the overall mineralised structure
- Mineralisation at Kadutu appears to widen towards the south possibly linked with mineralised splay faults subsidiary to the main controlling structure

#### **Regional Exploration**

- The Company has commenced regional work programmes over those parts of the 14 permits held by Regal SK not previously explored in detail
- A separate follow up programme to further investigate anomalous results identified from earlier regional programmes is underway with the purpose to maintain a pipeline of targets for drill testing
- Reconnaissance exploration on PR4816 (contiguous to the Matala East permit where a 17km long high tenor soil anomaly delineated) has identified artisanal hard rock workings

The Directors of Regal Resources Ltd ("Regal" or "the Company") (**ASX:RER**) are pleased to provide an update on exploration activities from the Company's Regal SK JV area, located in the South Kivu Province, Democratic Republic of Congo (DRC, Figure 1).

### Ngoy Project

The Company has successfully completed the Phase II drilling programme at the Kadutu Prospect. A total of 32 holes (NGODD020 to NGODD051) were drilled for a total of 5,748.40m testing the southern part of a 6km long geochemical anomaly, which forms the Ngoy Project.

The 32 drill holes were drilled at Kadutu with the aim of testing an exploration target of 4Mt to 6Mt at a grade of 2g/t to 4g/t Au over a 1,000m strike length.

Phase II assay results to date have helped delineate mineralisation over a strike length of 650m with a further 100m indicated from geological logging, giving a current total strike length of 750m (Figure 2). Mineralisation remains open along strike. At the southern extent of the known mineralised structure holes NGODD046 and NGODD047, intersected broad zones of disseminated arsenopyrite and quartz veining hosted within amphibolite. Typically, arseonpyrite shows a strong correlation with gold mineralisation.

A change in host rock lithology on the southernmost drill traverse coincides with a divergence in the soil anomaly trend and is now thought to possibly represent a splay structure in the system that was not previously recognised.

Drilling has confirmed mineralisation to a sub-vertical depth of about 150m along the entire strike length of the mineralisation. Two holes, NGODD049 and NGODD050, were drilled to test for the down dip extensions of the mineralisation intersected in holes NGODD020 and NGODD030 which reported; 16.55m @ 5.16g/t and 23.62m @ 3.66g/t Au respectively. Strong visible mineralisation was intersected in both NG0DD049 and NGODD50 at depth of around 200m further confirming that mineralisation remains open at depth.

Assay results are reported for an additional 14 holes with only results for seven remaining holes (NGODD045 to NGODD051) expected by the end of June (Tables 1 and 2, Figure 2).

Results have been received for holes NGODD031 to NGODD44 (inclusive ,Table 1). Significant new results include five (5) intercepts: NGODD033: 5.90m @ 2.44g/t Au, NGODD037: 3.40m @ 11.96g/t Au, NGODD038: 18.80m @ 1.99g/t Au (includes 4.60m @ 6.21g/t Au), NGODD039: 16.70m @ 2.38g/t Au (includes 8m @ 4.36g/t Au), NGODD040: 18.30m @ 1.38g/t Au.

The results further demonstrate the economic potential of the project and the upside to expand the extent of mineralisation (Figures 3 and 4).

Gold mineralisation is distributed within and around a north-northeast trending, continuous, brittle-ductile shear zone which runs sub-parallel to a meta-sedimentary rocks (quartz-sericite-biotite gneiss) sandwiched between two metamorphosed mafic (amphibolite) rock layers and later intruded by boudinaged pegmatite dykes (Figures 3 and 4). Within the shear zone gold mineralisation is associated with strong pervasive and vein-type silica-sericite-biotite-arsenopyrite-pyrrhotite and pyrite alteration (Figures 2 and 3).

Three-dimensional modelling and interpretation of the new drilling data has demonstrated the true thickness of mineralisation ranges up to 20m with an average thickness of approximately 10m. The grade X width section (metal distribution) of mineralisation in long section is shown in Figure 5 and suggests mineralisation comprises steep, north-northeast plunging shoots separated by zones of intense alteration with lower gold tenor.

Before starting the next phase of drilling programme the Company will undertake a review of all results and conduct a detailed synthesis of analytical results and the geological model. This will in assist in optimising the design of Phase III programme. During the review period the Company will also be undertaking metallurgical test work at SRK South Africa to determine the nature and potential gold recovery of the mineralisation.

A drill rig is being maintained on standby at Kadutu in readiness for the continuation of drilling work which is planned for Q4, 2013.

Future drilling will be directed towards testing strike extensions to the existing mineralised body and down-dip extensions below 150m targeting high grade structures which are presently open at depth and which are highlighted in the long section (Figure 4).

The Company is pleased with the latest drilling results which highlight the continuity of the mineralised zone discovered at Kadutu and remains confident that it will reach the proposed exploration target following the completion of the review and the continuation of drilling. The next phase of drilling can possibly extend this to the adjoining Nyamikundu Prospect 1.4km to north.

#### **Regional Exploration**

The Company has committed to a regional exploration programme to cover those parts of the 14 permits making up the Regal SK project that have not been previously explored. The Company has also embarked on a more detailed follow up phase of exploration targeting high priority geophysical and geochemical anomalies identified from earlier rounds of regional work. The purpose is to maintain a pipeline of drill ready projects.

## Matala

The Matala Project comprises two contiguous permits PR4816 and PR4809. Earlier soil sampling programmes on PR4809 delineated a 17km long high tenor soil anomaly which bedrock channel sample results including 17m @ 2.51g/t Au and 2m @ 12.95 g/t Au indicate reflect bedrock mineralisation.

Permit PR4816 was recently acquired. The 17km long gold-in-soil anomaly at Matala extends against the western tenement border (Figure 5). As satellite imagery suggests, the ridge (Figure 5) underlying the soil anomaly is caused by silicified and altered bed rock and uninterruptedly extends into PR4816. In a similar way, extends the magnetic signature of the bedrock in PR 4809 in an undisturbed matter against the tenement border.

In May, a regional first-pass exploration of the permit commenced. Reconnaissance mapping by the geological team has identified a small number of artisanal gold workings in PR4816 (Figure 5). A total of 159 samples were collected from channels, workings and outcrop around the working areas.

A systematic soil sampling program of 1045 samples on a 100 by 400m grid is currently in progress over the projected western extension of the Matala soil anomaly. It is anticipated that resulting data will establish a link to the workings which will underpin the strength and significance of the Matala soil anomaly.

The Company geologist's strongly believe that PR4816 contains the extension to the geological features hosting the 17km soil anomaly.

Hole ID	From (m)	To (m)	Down hole Interval (m)	Au (g/t)	% Recovery	Comments			
NGODD031	46	47.3	1.30	0.73	100				
NGODD032	65.9	71.22	5.32	0.61	100				
NGODD033	90	95.9	5.90	2.44	100				
NGODD034	33.9	35.87	1.97	1.47	100				
	113.3	117.8	4.50	0.67	98				
NGODD035	67	73.9	6.90	0.85	100				
NGODD036	90.3	93.85	3.55	0.64	100				
NGODD037	138.8	142.2	3.40	11.96	100				
	158	158.9	0.90	1.2	89				
NGODD038	29.7	48.5	18.80	1.99	97	includes 4.6m @ 6.21g/t Au			
NGODD039	38	54.7	16.70	2.38	100	includes 8m @ 4.36g/t Au			
NGODD040	58.1	76.4	18.30	1.38	99				
NGODD041	26.75	34.6	7.85	0.47					
	131.5	138.27	6.77	0.84					
	141.6	148.75	7.15	0.21					
NGODD042						NSI			
NGODD043						NSI			
NGODD044	60.2	65	4.80	0.29	100				
Notes: 1 All holes are diamond drill holes containing NO2 and HO core, 2 All samples comprise crushed									

Table 1: New drill-hole intercepts received for Phase II

Notes: 1. All holes are diamond drill holes containing NQ2 and HQ core. 2. All samples comprise crushed half core. 3. Assaying is conducted at ALS Chemex Laboratories, Johannesburg, South Africa using industry standard 30g Fire Assay with AAS finish. Assays >100g/t Au are finished gravimetrically. 4.
Certified reference materials, blanks and crushed lab duplicates are inserted into the sample stream and monitored by CSA Global UK. 5. Down hole intercepts are quoted to two decimal places using a >0.2g/t lower cut-off which includes no more than 3m of internal dilution (>0.2g/t Au). 6. No high cut-off grade has been applied. 7. True widths are approximately 45-65% of the reported down-hole interval. 8. NSI – no significant intercept.

Drill Hole	East	North	RL	Dip	Azimuth	Hole	EOH	Recovery	Comments
	[UTIVI]		690	-68	200	Type	210.00	(/0)	accove received
NGODD020	579427	9590769	602	-08	290		210.00	90	assays received
NGODDUZI	579406	9590098	692	-05	290		240.00	99	assays received
NGODD022	579405	9596747	684	-50	290		100.20	98	assays received
NGODD023	579406	9596749	698	-60	290		160.00	96	assays received
NGODD024	579412	9596747	694	-66	290		220.00	97	assays received
NGODD025	579438	9596837	692	-50	290	DD	140.00	95	assays received
NGODD026	579442	9596832	698	-60	290	DD	175.00	96	assays received
NGODD027	579453	9596828	694	-66	290	DD	218.80	98	assays received
NGODD028	579356	9596649	705	-51	290	DD	170.80	97	assays received
NGODD029	579363	9596649	679	-60	290	DD	215.40	98	assays received
NGODD030	579373	9596644	685	-51	290	DD	218.10	99	assays received
NGODD031	579323	9596561	698	-51	290	DD	189.20	93	assays received
NGODD032	579328	9596553	625	-60	290	DD	196.20	95	assays received
NGODD033	579335	9596554	674	-66	290	DD	201.60	95	assays received
NGODD034	579340	9596552	700	-71	290	DD	205.10	99	assays received
NGODD035	579363	9596925	698	-51	290	DD	145.30	92	assays received
NGODD036	579468	9596930	700	-60	290	DD	180.70	90	assays received
NGODD037	579478	9596930	687	-66	290	DD	221.00	92	assays received
NGODD038	579305	9596458	677	-52	290	DD	112.80	96	assays received
NGODD039	579311	9596458	677	-65	290	DD	157.10	98	assays received
NGODD040	579313	9596455	677	-72	290	DD	160.50	99	assays received
NGODD041	579363	9596441	677	-72	290	DD	159.50	95	assays received
NGODD042	579443	9596880	687	-51	290	DD	127.20	89	assays received
NGODD043	579517	9597019	698	-51	290	DD	95.10	83	assays received
NGODD044	579523	9597014	697	-60	290	DD	148.00	88	assays received
NGODD045	579451	9596877	690	-60	290	DD	233.90	93	assays pending
NGODD046	579339	9596328	680	-52	270	DD	196.30	93	assays pending
NGODD047	579345	9596331	674	-66	290	DD	83.90	92	assays pending
NGODD048	579345	9596599	689	-66	290	DD	168.70	91	assays pending
NGODD049	579381	9596643	688	-70	290	DD	220.20	92	assays pending
NGODD050	579435	9596782	695	-71	290	DD	230.40	95	assays pending
NGODD051	579470	9596883	690	-71	290	DD	247.40	98	assays pending

Table 2: Collar details for all drill holes completed for Phase II

#### Competent Person Statement:

Scientific or technical information in this release has been prepared by Mr David Young and Dr Simon Dorling, the Company's Managing and Technical Directors. Mr David Young is a member of the Australian Institute of Mining and Metallurgy (AusIMM) and Dr Simon Dorling are members of the Australasian Institute of Geoscientists (MAIG) and both sufficient experience which is relevant to the style of mineralisation under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Mr David Young and Dr Simon Dorling consent to the inclusion in this report of the Information, in the form and context in which it appears.

#### Forward-Looking Statements:

This release contains statements that are "forward-looking". Generally, the words "expect," "intend," "estimate," "will" and similar expressions identify forward-looking statements. By their very nature, forward-looking statements are subject to known and unknown risks and uncertainties that may cause our actual results, performance or achievements, or that of our industry, to differ materially from those expressed or implied in any of our forward-looking statements. Statements in this release regarding the Company's business or proposed business, which are not historical facts, are "forward looking" statements that involve risks and uncertainties, such as estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. The potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made.

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David Young Managing Director



Figure 1. JV Project location map and significant gold deposits







Figure 3: Geological cross section Kadutu Prospect



#### Figure 4: Long section showing meter x grade value contours

Figure 5: Location of artisanal hard rock and alluvial mining and area of current regional exploration. Stars identify alluvial and hard rock artisanal workings

